

State of Montana  
Department of Environmental Quality  
Helena, Montana 59620

**AIR QUALITY OPERATING PERMIT NUMBER OP1551-05**

Reopening for Cause/Significant Modification Initiated: **February 13, 2008**  
Application Deemed Administratively Complete: **February 13, 2008**  
Application Deemed Technically Complete: **February 13, 2008**  
AFS Number: 030-021-0005A

Draft Issue Date: **March 2, 2009**  
Proposed Issue Date:  
End of EPA 45-day Review:  
Date of Decision:  
Effective Date:  
Expiration Date:

In accordance with the Montana Code Annotated sections 75-2-217 and 218, and the Administrative Rules of Montana (ARM) Title 17, Chapter 8, Subchapter 12, Operating Permit Program, ARM 17.8.1201, *et seq.*,

**Montana-Dakota Utilities Co. - Glendive Generating Station**  
**SE ¼ and Lot 4 of Section 15, Township 15 North, Route 55 East in Dawson County**  
**P.O. Box 201**  
**Glendive, Montana 59330-0201**

hereinafter, referred to as "Montana-Dakota", is authorized to operate a stationary source of air contaminants consisting of the emission units described in this permit. Until this permit expires or is modified or revoked, Montana-Dakota is allowed to discharge air pollutants in accordance with the conditions of this permit. All conditions in this permit are federally and state enforceable unless otherwise specified. Requirements which are state only enforceable are identified as such in the permit. A copy of this permit must be kept on site at the above named facility.

Issued by the Department of Environmental Quality

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Permit Issuance and Appeal Process:** In accordance with ARM 17.8.1232, the Department of Environmental Quality (Department) is providing a public comment period from March 2, 2009, to April 1, 2009, to accept comments on this draft permit. Any member of the public, including representatives of the facility, desiring to comment on this draft permit must submit all comments to the Department by April 1, 2009, to be considered. Comments may address the Department analysis and determination or information submitted by the applicant. A public hearing regarding issuance of this permit may be requested by submitting a written request to the Department within the public comment period. The Department intends to issue the proposed operating permit after the comment period has expired and after any required public hearing. The proposed permit will be sent to the United States Environmental Protection Agency (EPA). The EPA is allowed a 45-day review period on the proposed permit. After the EPA comment period has expired, the Department intends to issue a decision on the permit. In accordance with ARM 17.8.1210(j), the Department's decision regarding issuance of the permit is not effective until 30 days have elapsed from the date of the decision. The decision may be appealed to the Board of Environmental Review by filing a request for a hearing within 30 days after the decision. For more information please contact the Department at (406) 444-3490.

**Montana Air Quality Operating Permit  
Department of Environmental Quality  
Permitting and Compliance Division**

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Terms not otherwise defined in this permit or in the Definitions and Abbreviations appendices of this permit have the meaning assigned to them in the referenced regulations.

## **SECTION I - GENERAL INFORMATION**

Company Name: **Montana-Dakota Utilities Co. (Montana-Dakota)**

Mailing Address: **400 North Fourth Street**

City: **Bismarck** State: **North Dakota** Zip: **58501**

Plant Name: **Glendive Generating Station**

Plant Location: **SE ¼ and Lot 4 of Section 15, Township 15 North, Route 55 East in Dawson County**

Plant Mailing Address: **2001 Merrill Ave., Glendive, MT 59330**

Responsible Official: **Andrea L. Stomberg** Phone: **(701) 222-7752**

Facility Contact Person: **Ken Wangler** Phone: **(701) 222-7835**

Primary SIC Code: **4911**

Nature of Business: **Electrical power generation, transmission, and distribution.**

Description of Process: **The Montana-Dakota Utilities Co. Glendive Generating Station uses two dual-fuel turbines for generating electricity as a peaking unit.**

## SECTION II - SUMMARY OF EMISSION UNITS

The following emission units are regulated by this permit (ARM 17.8.1211):

<b>Emissions Unit ID</b>	<b>Description</b>	<b>Pollution Control Device/Practice</b>
EU1	34-MW General Electric MS-6000 Turbine/Generator Peaking Plant (Natural Gas or No. 2 Fuel Oil)	none
EU2	43-MW General Electric LM-6000 Turbine/Generator Peaking Plant (Natural Gas or No. 2 Fuel Oil)	Dry-Low NO <sub>x</sub> combustor
EU3	600-hp Detroit Diesel 7123-7300 Starting Motor	none
EU4	No.2 Fuel Oil Storage Tank (74,000 gallon capacity)	none
EU5	No.2 Fuel Oil Storage Tank (200 gallon capacity)	none
EU6	Emergency Diesel Generator	None

### SECTION III - PERMIT CONDITIONS

The following requirements and conditions are applicable to the facility or to specific emission units located at the facility (ARM 17.8.1211, 1212, and 1213).

#### A. Facility-Wide

Condition	Rule Citation	Rule Description	Pollutant/Parameter	Limit
A.1	ARM 17.8.105	Testing Requirements	Testing Requirements	-----
A.2	ARM 17.8.304(1)	Visible Air Contaminants	Opacity	40%
A.3	ARM 17.8.304(2)	Visible Air Contaminants	Opacity	20%
A.4	ARM 17.8.308(1)	Particulate Matter, Airborne	Fugitive Opacity	20%
A.5	ARM 17.8.308(2)	Particulate Matter, Airborne	Reasonable Precautions	-----
A.6	ARM 17.8.308	Particulate Matter, Airborne	Reasonable Precautions Construction	20%
A.7	ARM 17.8.309	Particulate Matter, Fuel Burning Equipment	Particulate Matter	$E = 0.882 * H^{-0.1664}$ or $E = 1.026 * H^{-0.233}$
A.8	ARM 17.8.310	Particulate Matter, Industrial Processes	Particulate matter	$E = 4.10 * P^{0.67}$ or $E = 55 * P^{0.11} - 40$
A.9	ARM 17.8.322(4)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (liquid)	11lb/million Btu fired
A.10	ARM 17.8.322(5)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (gaseous)	50 gr/100 CF
A.11	ARM 17.8.324(3)	Hydrocarbon Emissions, Petroleum Products	Gasoline Storage Tanks	-----
A.12	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	65,000 Gallon Capacity	-----
A.13	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	Oil-effluent Water Separator	-----
A.14	ARM 17.8.342	NESHAPs General Provisions	SSM Plans	Submittal
A.15	ARM 17.8.1212	Reporting Requirements	Compliance Monitoring	-----
A.16	ARM 17.8.1207	Reporting Requirements	Annual Certification	-----

#### Conditions

- A.1. Pursuant to ARM 17.8.105, any person or persons responsible for the emissions of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct test, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

Compliance demonstration frequencies that list “as required by the Department” refer to ARM 17.8.105. In addition, for such sources, compliance with limits and conditions listing “as required by the Department” as the frequency, is verified annually using emission factors and engineering calculations by the Department’s compliance inspectors during the annual emission inventory review; in the case of Method 9 tests, compliance is monitored during the regular inspection by the compliance inspector.

- A.2. Pursuant to ARM 17.8.304(1), Montana-Dakota shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes unless otherwise specified by rule or in this permit.
- A.3. Pursuant to ARM 17.8.304(2), Montana-Dakota shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes unless otherwise specified by rule or in this permit.
- A.4. Pursuant to ARM 17.8.308(1), Montana-Dakota shall not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes unless otherwise specified by rule or in this permit.
- A.5. Pursuant to ARM 17.8.308(2), Montana-Dakota shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne particulate matter unless otherwise specified by rule or in this permit.
- A.6. Pursuant to ARM 17.8.308, Montana-Dakota shall not operate a construction site or demolition project unless reasonable precautions are taken to control emissions of airborne particulate matter. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater average over 6 consecutive minutes unless otherwise specified by rule or in this permit.
- A.7. Pursuant to ARM 17.8.309 unless otherwise specified by rule or in this permit, Montana-Dakota shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of the maximum allowable emissions of particulate matter for existing fuel burning equipment and new fuel burning equipment calculated using the following equations:

For existing fuel burning equipment (installed before November 23, 1968):  $E = 0.882 * H^{0.1664}$   
 For new fuel burning equipment (installed on or after November 23, 1968):  $E = 1.026 * H^{0.233}$

Where H is the heat input capacity in MMBtu per hour and E is the maximum allowable particulate emissions rate in lbs. per MMBtu.

- A.8. Pursuant to ARM 17.8.310, unless otherwise specified by rule or in this permit, Montana-Dakota shall not cause or authorize particulate matter to be discharged from any operation, process, or activity into the outdoor atmosphere in excess of the maximum hourly allowable emissions of particulate matter calculated using the following equations:

For Process weight rated up to 30 tons per hour:  $E = 4.10 * P^{0.67}$   
 For process weight rates in excess of 30 tons per hour:  $E = 55.9 * P^{0.11} - 40$

Where E = rate of emissions in pounds per hour and P = process weight rate in tons per hour.

- A.9. Pursuant to ARM 17.8.322(4), Montana-Dakota shall not burn any liquid or solid fuels containing sulfur in excess of 1 pound of sulfur per million Btu fired.

- A.10. Pursuant to ARM 17.8.322(5), Montana-Dakota shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions unless otherwise specified by rule or in this permit.
- A.11. Pursuant to ARM 17.8.324(3), Montana-Dakota shall not load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device or is a pressure tank as described in ARM 17.8.324(1), unless otherwise specified by rule or in this permit.
- A.12. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, Montana-Dakota shall not place, store or hold in any stationary tank, reservoir or other container of more than 65,000 gallon capacity any crude oil, gasoline or petroleum distillate having a vapor pressure of 2.5 pounds per square inch absolute or greater under actual storage conditions, unless such tank, reservoir or other container is a pressure tank maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is designed and equipped with a vapor loss control device, properly installed, in good working order and in operation.
- A.13. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, Montana-Dakota shall not use any compartment of any single or multiple-compartment oil-effluent water separator, which compartment receives effluent water containing 200 gallons a day or more of any petroleum product from any equipment processing, refining, treating, storing or handling kerosene or other petroleum product of equal or greater volatility than kerosene, unless such compartment is equipped with a vapor loss control device, constructed so as to prevent emission of hydrocarbon vapors to the atmosphere, properly installed, in good working order and in operation.
- A.14. Pursuant to ARM 17.8.342 and 40 CFR 63.6, Montana-Dakota shall submit to the Department a copy of any startup, shutdown, and malfunction (SSM) plan required under 40 CFR 63.6(e)(3) within 30 days of the effective date of this operating permit (if not previously submitted), within 30 days of the compliance date of any new National Emission Standard for Hazardous Air Pollutants (NESHAPs) or Maximum Achievable Control Technology (MACT) standard, and within 30 days of the revision of any such SSM plan, when applicable. The Department requests submittal of such plans in electronic form, when possible.
- A.15. On or before February 15 and August 15 of each year, Montana-Dakota shall submit to the Department the compliance monitoring reports required by Section V.D of this permit. For the reports due by February 15 of each year, Montana-Dakota may submit a single report provided that it contains all the information required by Sections V.B & V.D. Per ARM 17.8.1207,

*any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including semiannual monitoring reports), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, “based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.”*



- A.16. By February 15 of each year, Montana-Dakota shall submit to the Department the compliance certification report required by Section V.B. of this permit. The annual certification report required by Section V.B. of this permit must include a statement of compliance based on the information available which identifies any observed documented or otherwise known instances of noncompliance for each applicable requirement. Per ARM 17.8.1207,

*any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including semiannual monitoring reports), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, “based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.”*

**B. EU1 – 34-MW General Electric MS-6000 Turbine/Generator Peaking Plant (Natural Gas or Diesel)**

Permit Condition	Pollutant/Parameter	Permit Limitation	Compliance Demonstration		Reporting
			Method	Frequency	
B.1, B.8, B.16, B.20, B.21, B.22	Opacity	20%	While burning refinery quality No.2 fuel oil, the method of compliance is a Method 9	As required by the Department and Section III.A.1	Semiannual
			Otherwise, the method is burning pipeline quality natural gas	Ongoing	Semiannual
B.2, B.9, B.17, B.21, B.22	Particulate from fuel combustion	$E=1.026 \cdot H^{-0.233}$	Refinery quality No.2 fuel oil or pipeline quality natural gas	Ongoing	Semiannual
B.3, B.10, B.17, B.21, B.22	Sulfur compounds in fuel (gaseous)	<u>50 grains</u> 100 SCF	Burning pipeline quality natural gas	Ongoing	Semiannual
B.4, B.11, B.17, B.18, B.21, B.22	Sulfur compound in fuel (liquid)	1 lb/MMBtu fired	While burning refinery quality No.2 fuel oil, the method is a fuel analysis provided by the fuel supplier	Ongoing	Semiannual
			Otherwise, the method is burning pipeline quality natural gas	Ongoing	Semiannual
B.5, B.12, B.17, B.21, B.22	Fuel type	Pipeline quality natural gas or refinery quality No.2 fuel oil	Log of fuel type used	Weekly	Semiannual

Permit Condition	Pollutant/ Parameter	Permit Limitation	Compliance Demonstration		Reporting
			Method	Frequency	
B.6, B.13, B.17, B.21, B.22	Operational limit when burning only pipeline quality natural gas	2620 hours	Log hours of operation and corresponding fuel used	Ongoing	Semiannual
B.6, B.13, B.17, B.21, B.22	Operational limit when burning only No. 2 fuel oil	1667 hours	Log hours of operation and corresponding fuel used	Ongoing	Semiannual
B.6, B.13, B.17, B.21, B.22	Operational limit when burning a combination of pipeline quality natural gas and No.2 fuel oil in the same year	"X hours" on a rolling 12-month basis  "X hours" shall be determined as follows:  $X = 2,620 \text{ hours} - 1.572 * Y \text{ hours}$	Log hours of operation and corresponding fuel used	Ongoing	Semiannual
B.7, B.14, B.15, B.16, B.17, B.19, B.21, B.22	NO <sub>x</sub>	225 tons per rolling 12-month period using the following equation:  Total Emissions (tons) = ((A hours * ERG)+(B hours * ERF))/2000	Log hours of operation of the turbine according to fuel used  Use the emission rates from the most recent source test on file with the Department	Monthly	Semiannual

## Conditions

- B.1. Montana-Dakota shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibits an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(1)).
- B.2. Montana-Dakota shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of  $E = 1.026 * H^{-0.233}$  for new fuel burning equipment, where: H = heat input capacity in MMBtu/hr and E = maximum allowable emission rate in lb/MMBtu (ARM 17.8.309).
- B.3. Montana-Dakota shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 standard cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions (ARM 17.8.322(5)).
- B.4. Montana-Dakota shall not burn any liquid fuel containing sulfur compounds in excess of 1 lb/MMBtu of liquid fired (ARM 17.8.322(4)).
- B.5. Montana-Dakota shall only combust pipeline quality natural gas or refinery quality No. 2 fuel oil in the turbine (ARM 17.8.752).

- B.6. Montana-Dakota shall not operate the General Electric MS-6000 Turbine (Unit 1) for more than the following:
- a. 2,620 hours per year on a rolling 12-month basis when combusting pipeline quality natural gas (ARM 17.8.752);
  - b. 1,667 hours per year on a rolling 12-month basis when combusting No.2 fuel oil (ARM 17.8.752); and
  - c. "X hours" on a rolling 12-month basis when pipeline quality natural gas and No.2 fuel oil are combusted during a given year. "X hours" shall be determined as follows; (ARM 17.8.752):
    - i.  $X = 2,620 \text{ hours} - 1.572 * Y \text{ hours}$  (2620 hrs > X > 1667 hrs)
    - ii. Where X = Total adjusted hours of operation
    - iii. Y = number of hours burning No. 2 Fuel oil
    - iv. 2620 = Hours of natural gas operation
    - v. 1.572 = the ratio of emissions from burning No. 2 Fuel oil compared to natural gas.
- B.7. Montana-Dakota shall not exceed 225 tons of total nitrogen oxides (NO<sub>x</sub>) emissions from Unit 1 (combusting pipeline quality natural gas or a combination of pipeline quality natural gas and No.2 fuel oil) and its associated startup engine per rolling 12-month period (ARM 17.8.752).

### **Compliance Demonstration**

- B.8. As required by the Department and Section III.A.1, Montana-Dakota shall conduct a Method 9 test to monitor compliance with the opacity limit in Section III.B.1 while burning refinery quality No. 2 fuel oil. Method 9 tests shall be performed in accordance with the Montana Source Test Protocol and Procedure Manual. Otherwise, Montana-Dakota shall monitor compliance with the opacity requirement by burning pipeline quality natural gas on a continuous basis (ARM 17.8.106 and ARM 17.8.1213).
- B.9. Monitoring compliance with the particulate from fuel combustion requirement shall be satisfied by burning refinery quality No.2 fuel oil or pipeline quality natural gas on a continuous basis (ARM 17.8.1213).
- B.10. Monitoring compliance with the sulfur compounds in fuel (gaseous) requirements shall be satisfied by burning pipeline quality natural gas on a continuous basis. While burning No.2 fuel oil, the sulfur compounds in fuel (gaseous) requirements do not apply (ARM 17.8.1213).
- B.11. Monitoring compliance with the sulfur compounds in fuel (liquid) requirements may be satisfied by annually providing a supplier's fuel analysis while burning No.2 fuel oil. The analysis must demonstrate that the No.2 fuel oil is less than 1 pound/million Btu fired. Otherwise, the method of compliance is burning pipeline quality natural gas on a continuous basis (ARM 17.8.1213).
- B.12. Montana-Dakota shall log, by month, the type of fuel used to operate Unit 1 to monitor compliance with Section III.B.5 (ARM 17.8.1213).
- B.13. Montana-Dakota shall document, by month, the number of hours that Unit 1 combusted pipeline quality natural gas, No.2 fuel oil, and the corresponding adjusted hours of operation (as defined in Section B.6.c.ii) while burning pipeline quality natural gas and No.2 fuel oil during the previous rolling 12-month period. By the 25th of each month, Montana-Dakota shall total the hours that Unit 1 combusted pipeline quality natural gas, No.2 fuel oil, and the corresponding adjusted hours

of operation while burning pipeline quality natural gas and No.2 fuel oil during the previous 12 months to verify compliance with the limitations in Section III.B.6.a, III.B.6.b, and III.B.6.c. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.1213).

- B.14. Compliance with Section III.B.7 is determined when total NO<sub>x</sub> emissions are less than or equal to 225 total tons, using the following equations on a rolling 12-month basis (ARM 17.8.1213):

$$\text{Total emissions (tons)} = ((A \text{ hours} * \text{ERG}) + (B \text{ hours} * \text{ERF})) / 2000$$

Where, A hours = actual hours of operation when combusting natural gas;

B hours = actual hours of operation when combusting No. 2 Fuel Oil;

ERG = hourly NO<sub>x</sub> emission rate (lb/hr) when combusting natural gas; and

ERF = hourly NO<sub>x</sub> emission rate (lb/hr) when combusting No. 2 fuel oil.

Emission rates for each "hours of operation" shall be calculated as follows:  
NO<sub>x</sub> Emissions=hours of operation using a specific fuel X stack test (lb/hr).

The most recent source test submitted to the Department by Montana-Dakota-Glendive for the turbine shall be used to obtain the hourly emission rate (lb/hr).

- B.15. Montana-Dakota shall test the Unit 1 turbine and demonstrate compliance with the NO<sub>x</sub> emission limit contained in Section III.B.7 within 40 days of the total hours of operation equaling 1,620 in any 12-month period. The turbine shall be tested using the major fuel combusted during the previous 500 hours of operation. All testing and reporting of tests shall include a determination of the amount of NO<sub>x</sub> and the amount of NO<sub>2</sub> emissions from the turbine. Testing is not required to be conducted more frequently than once every 4 years, regardless of hours operated (ARM 17.8.749, ARM 17.8.106, and ARM 17.8.1213).

### **Recordkeeping**

- B.16. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site or under Montana-Dakota's control (ARM 17.8.106 and ARM 17.8.1212).
- B.17. Montana-Dakota shall maintain a log of the hours of operation of the turbine according to the fuel burned (pipeline quality natural gas or No.2 fuel oil). The log shall identify the date and time that fuel types are changed. The log must be maintained on-site (Montana-Dakota-Glendive Generating Station) and must be submitted to the Department upon request (ARM 17.8.749 and 17.8.1212).
- B.18. Montana-Dakota shall maintain a record of the fuel analyses provided by the fuel provider for the fuel types used during the previous 12-month period (ARM 17.8.1212).
- B.19. Montana-Dakota shall document, by month, the NO<sub>x</sub> emissions from Unit 1 and its associated startup engine. By the 25<sup>th</sup> of each month, Montana-Dakota shall total the NO<sub>x</sub> emissions from Unit 1 and its associated startup engine during the previous 12 months to verify compliance with the limitation in Section II.B.14 (ARM 17.8.1212).

## Reporting

- B.20. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- B.21. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- B.22. The semiannual monitoring report shall provide (ARM 17.8.1212):
- A summary of results of the last source testing that was performed;
  - Reports of any required monitoring performed during the reporting period, with all instances of deviations from any permit requirements identified.
  - A summary of the record of the fuel analyses provided by the fuel provider for the fuel types used during the previous 12-month period;
  - A summary of the log of the hours of operation of the turbine according to the fuel burned;
  - A summary of the NO<sub>x</sub> emissions from the plant, by month.
- C. **EU2 – 43-MW General Electric LM-6000 Turbine/Generator Peaking Plant (Natural Gas or Diesel)**

Permit Condition	Pollutant/Parameter	Permit Limitation	Compliance Demonstration		Reporting
			Method	Frequency	
C.1, C.14, C.25, C.31, C.32, C.33	Opacity	20%	While burning refinery quality No.2 fuel oil, the method of compliance is a Method 9	As required by the Department and Section III.A.1	Semiannual
			Otherwise, the method is burning pipeline quality natural gas	Ongoing	Semiannual
C.2, C.15, C.26, C.32, C.33	Particulate from fuel combustion	$E=1.026^* H^{-0.233}$	Refinery quality No.2 fuel oil or pipeline quality natural gas	Ongoing	Semiannual
C.3, C.16, C.26, C.32, C.33	Sulfur compounds in fuel (gaseous)	<u>50 grains</u> 100 SCF	Burning pipeline quality natural gas	Ongoing	Semiannual

Permit Condition	Pollutant/Parameter	Permit Limitation	Compliance Demonstration		Reporting
			Method	Frequency	
C.4, C.17, C.27, C.32, C.33	Sulfur compound in fuel (liquid)	<u>1 pound</u> million Btu fired	While burning refinery quality No.2 fuel oil, the method is a fuel analysis provided by the fuel supplier	Annual	Semiannual
			Otherwise, the method is burning pipeline quality natural gas	Ongoing	Semiannual
C.5, C.18, C.26, C.32, C.33	Fuel type	Pipeline quality natural gas or refinery quality No.2 fuel oil	Log of fuel type used	Weekly	Semiannual
C.6, C.19, C.26, C.32, C.33	Operational limit when burning only pipeline quality natural gas	6500 hours	Log hours of operation and corresponding fuel used	Ongoing	Semiannual
C.6, C.19, C.26, C.32, C.33	Operational limit when burning only No. 2 fuel oil	3254 hours	Log hours of operation and corresponding fuel used	Ongoing	Semiannual
C.6, C.19, C.26, C.32, C.33	Operational limit when burning a combination of pipeline quality natural gas and No.2 fuel oil in the same year	"X hours" on a rolling 12-month basis  "X hours" shall be determined as follows:  $X = 6500 \text{ hours} - 1.998 * Y \text{ hours}$	Log hours of operation and corresponding fuel used	Ongoing	Semiannual
C.7, C.20, C.25, C.28, C.31, C.32, C.33	NO <sub>x</sub>	247 tons per rolling 12 month period using the following equation:  Total Emissions (tons) = ((A hours * ERG)+(B hours * ERF))/2000	Performance Test  Log hours of operation of the turbine according to fuel used  Use the emission rates from the most recent source test on file with the Department	Monthly	Semiannual

Permit Condition	Pollutant/Parameter	Permit Limitation	Compliance Demonstration		Reporting
			Method	Frequency	
C.8, C.21, C.25, C.31, C.32, C.33	NO <sub>x</sub> Emission Limit while combusting pipeline quality natural gas	76.0 lb/hr	Performance Test	Biannual or as requested by the Department	Semiannual
C.9, C.21, C.25, C.31, C.32, C.33	CO Emission Limit while combusting pipeline quality natural gas	17.0 lb/hr	Performance Test	Biannual or as requested by the Department	Semiannual
C.10, C.22, C.25, C.31, C.32, C.33	NO <sub>x</sub> Emission Limit while combusting No. 2 fuel oil	151.8 lb/hr	Performance Test	Biannual or as requested by the Department	Semiannual
C.11, C.22, C.25, C.31, C.32, C.33	SO <sub>2</sub> Emission Limit while combusting No. 2 fuel oil	90.8 lb/hr	Performance Test	Biannual or as requested by the Department	Semiannual
C.12, C.23, C.29, C.32, C.33	Acid Rain Provisions	40 CFR 72-78 and Appendix F	40 CFR 72-78 and Appendix F	As required by Appendix F	Quarterly
C.13, C.24, C.30, C.32, C.33	40 CFR 60, Subpart GG	40 CFR 60, Subpart GG	40 CFR 60, Subpart GG	Ongoing	Semiannual

## Conditions

- C.1. Montana-Dakota shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibits an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(1)).
- C.2. Montana-Dakota shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of  $E = 1.026 * H^{-0.233}$  for new fuel burning equipment, where: H = heat input capacity in MMBtu/hr and E = maximum allowable emission rate in lb/MMBtu (ARM 17.8.309).
- C.3. Montana-Dakota shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 standard cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions (ARM 17.8.322(5)).
- C.4. Montana-Dakota shall not burn any liquid fuel containing sulfur compounds in excess of 1 lb/MMBtu of liquid fired (ARM 17.8.322(4)).
- C.5. Montana-Dakota shall only combust pipeline quality natural gas or refinery quality No. 2 fuel oil in the turbine (ARM 17.8.752).

- C.6. Montana-Dakota shall not operate the General Electric LM-6000 Turbine for more than the following:
- 6500 hours per year on a rolling 12-month basis when combusting pipeline quality natural gas (ARM 17.8.752)
  - 3254 hours per year on a rolling 12-month basis when combusting No.2 fuel oil (ARM 17.8.752)
  - "X hours" on a rolling 12-month basis when pipeline quality natural gas and No.2 fuel oil are combusted during a given year. "X hours" shall be determined as follows:  
  

$$X = 6500 \text{ hours} - 1.998 * Y \text{ hours} \quad (6500 \text{ hrs} > X > 3254 \text{ hrs})$$

Where X = Total adjusted hours of operation  
Y = number of hours burning No. 2 Fuel oil  
6500 = Hours of natural gas operation  
1.998 = the ratio of emissions from burning No. 2 Fuel oil compared to natural gas; (ARM 17.8.752).
- C.7. Montana-Dakota shall limit the hours of operation and/or the fuel combusted such that the sum of the NO<sub>x</sub> emissions from Unit 2 do not exceed 247 tons per rolling 12-month period when combusting pipeline quality natural gas, No.2 fuel oil, or a combination of pipeline quality natural gas and No.2 fuel oil. Any calculations used to establish NO<sub>x</sub> emissions shall be approved by the Department (ARM 17.8.752).
- C.8. NO<sub>x</sub> emissions from Unit 2, while combusting pipeline quality natural gas, shall not exceed 76.0 lb/hr (ARM 17.8.749).
- C.9. Carbon monoxide (CO) emissions from Unit 2, while combusting pipeline quality natural gas, shall not exceed 17.0 lb/hr (ARM 17.8.749).
- C.10. NO<sub>x</sub> emissions from Unit 2, while combusting No.2 fuel oil, shall not exceed 151.8 lb/hr (ARM 17.8.749).
- C.11. Sulfur dioxide (SO<sub>2</sub>) emissions from Unit 2, while combusting No.2 fuel oil, shall not exceed 90.8 lb/hr (ARM 17.8.749).
- C.12. Montana-Dakota shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements of the Acid Rain Program contained in 40 CFR 72-78 (40 CFR 72-78).
- C.13. Montana-Dakota shall comply with all of the applicable requirements, including emission limitations, monitoring, recordkeeping, reporting, and testing requirements, of 40 Code of Federal Regulations (CFR) 60, Subpart A, General Provisions, and Subpart GG, Standards of Performance for Stationary Gas Turbines (ARM 17.8.340 and 40 CFR 60, Subpart GG).

### **Compliance Demonstration**

- C.14. As required by the Department and Section III.A.1, Montana-Dakota shall conduct a Method 9 test to monitor compliance with the opacity limit in Section III.C.1 while burning refinery quality No. 2 fuel oil. Method 9 tests shall be performed in accordance with the Montana Source Test Protocol and Procedure Manual. Otherwise, Montana-Dakota shall monitor compliance with the opacity requirement by burning pipeline quality natural gas on a continuous basis (ARM 17.8.106 and ARM 17.8.1213).



- C.15. Monitoring compliance with the particulate from fuel combustion requirement may be satisfied by burning refinery quality No.2 fuel oil or pipeline quality natural gas on a continuous basis (ARM 17.8.1213).
- C.16. Monitoring compliance with the sulfur compounds in fuel (gaseous) requirements may be satisfied by burning pipeline quality natural gas on a continuous basis. While burning No.2 fuel oil, the sulfur compounds in fuel (gaseous) requirements do not apply (ARM 17.8.1213).
- C.17. Monitoring compliance with the sulfur compounds in fuel (liquid) requirements may be satisfied by annually providing a supplier's fuel analysis while burning No.2 fuel oil. The analysis must demonstrate that the No.2 fuel oil is less than 1 pound/million Btu fired. Otherwise, the method of compliance is burning pipeline quality natural gas on a continuous basis (ARM 17.8.1213).
- C.18. Montana-Dakota shall log, by month, the types of fuel used to operate Unit 2 to monitor compliance with Section III.C.5 (ARM 17.8.1213).
- C.19. Montana-Dakota shall document, by month, the number of hours that Unit 2 combusted pipeline quality natural gas, No.2 fuel oil, and the corresponding adjusted hours of operation (as defined in Section C.6.c.ii) while burning pipeline quality natural gas and No.2 fuel oil during the previous rolling 12-month period. By the 25th of each month, Montana-Dakota shall total the hours that Unit 2 combusted pipeline quality natural gas, No.2 fuel oil, and the corresponding adjusted hours of operation while burning pipeline quality natural gas and No.2 fuel oil during the previous 12-months to verify compliance with the limitations in Section II.A.6.a, 6.b, and 6.c. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.749 and ARM 17.8.1213).
- C.20. Montana-Dakota shall document, by month, the NO<sub>x</sub> emissions from Unit 2. By the 25<sup>th</sup> of each month, Montana-Dakota shall total the NO<sub>x</sub> emissions from Unit 2 during the previous 12 months to verify compliance with the limitation in Section II.C.7. Unless an alternate equation has been approved by the Department, compliance shall be determined using the following equation. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.1213).

$$\text{Total emissions (tons)} = ((A \text{ hours} * \text{ERG}) + (B \text{ hours} * \text{ERF})) / 2000$$

Where, A hours = actual hours of operation when combusting natural gas;

B hours = actual hours of operation when combusting No. 2 Fuel Oil;

ERG = hourly emission rate (lb/hr) when combusting natural gas; and

The most recent source test submitted to the Department by MDU-  
Glendive for the turbine shall be used to obtain the hourly emission rate  
(lb/hr).

ERF = hourly emission rate (lb/hr) when combusting No. 2 fuel oil.

The most recent source test submitted to the Department by MDU-  
Glendive for the turbine shall be used to obtain the hourly emission rate  
(lb/hr).

Emission rates for each "hours of operation" shall be calculated as follows:

NO<sub>x</sub> Emissions=hours of operation using a specific fuel X stack test  
(lb/hr).

- C.21. Montana-Dakota shall test the Unit 2 turbine and demonstrate compliance with the NO<sub>x</sub> and carbon monoxide (CO) emission limits contained in Section III.C.8 and III.C.9 of this permit. The performance test shall be conducted while the Unit 2 turbine is combusting natural gas.

Testing shall occur on an every 2-year basis or according to another testing/monitoring schedule as may be approved by the Department. All testing and reporting of tests shall include a determination of the amount of NO<sub>x</sub> and the amount of NO<sub>2</sub> emissions from the turbine (ARM 17.8.106, ARM 17.8.749, and ARM 17.8.1213).

- C.22. Montana-Dakota shall test the Unit 2 turbine and demonstrate compliance with the NO<sub>x</sub> and SO<sub>2</sub> emission limits contained in Section III.C.10 and III.C.11 of this permit. The performance test shall be conducted while the Unit 2 turbine is combusting No.2 fuel oil. Testing shall occur on an every 2-year basis or according to another testing/monitoring schedule as may be approved by the Department. All testing and reporting of tests shall include a determination of the amount of NO<sub>x</sub> and the amount of NO<sub>2</sub> emissions from the turbine (ARM 17.8.749 and ARM 17.8.106).
- C.23. Compliance monitoring for the applicable requirements contained in 40 CFR 72-78 shall be accomplished as described in 40 CFR 72-78 (40 CFR 72-78 and ARM 17.8.1213).
- C.24. Compliance monitoring for the applicable requirements contained in 40 CFR 60 Subpart GG shall be accomplished as described in 40 CFR 60, Subpart GG (ARM 17.8.342 and 40 CFR 60, Subpart GG).

### **Recordkeeping**

- C.25. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site or under Montana-Dakota's control (ARM 17.8.106 and ARM 17.8.1212).
- C.26. Montana-Dakota shall maintain a log of the hours of operation of the turbine according to the fuel burned (pipeline quality natural gas or No.2 fuel oil). The log shall identify the date and time that fuel types are changed. The log must be maintained on-site (Montana-Dakota-Glendive Generating Station) and must be submitted to the Department upon request (ARM 17.8.749 and 17.8.1212).
- C.27. Montana-Dakota shall maintain a record of the fuel analyses provided by the fuel provider for the fuel types used during the previous 12-month period (ARM 17.8.1212).
- C.28. Montana-Dakota shall maintain a log of the NO<sub>x</sub> emissions from Unit 2, by month, using the equation from Section III.C.20 to account for the NO<sub>x</sub> emissions corresponding to the type of fuel burned (ARM 17.8.1212).
- C.29. Montana-Dakota shall perform recordkeeping in accordance with 40 CFR 72-78, as applicable and as required by Appendix E and F of this permit (40 CFR 72-78 and ARM 17.8.1212).
- C.30. Montana-Dakota shall perform recordkeeping in accordance with 40 CFR 60, Subpart GG (ARM 17.8.1212 and 40 CFR 60, Subpart GG).

### **Reporting**

- C.31. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- C.32. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

C.33. The semiannual monitoring report shall provide (ARM 17.8.1212):

- a. A summary of results of the last source testing that was performed;
- b. Reports of any required monitoring performed during the reporting period, with all instances of deviations from any permit requirements identified;
- c. A summary of the hours Unit 2 combusted pipeline quality natural gas and No.2 fuel oil on a rolling 12-month basis;
- d. A summary of the record of the fuel analyses provided by the fuel provider for the fuel types used during the previous 12-month period;
- e. A summary of the log of the hours of operation of the turbine according to the fuel burned;
- f. A summary of the total NO<sub>x</sub> emissions from Unit 2 by month; and
- g. A summary of compliance with the requirements of 40 CFR 72-78, as applicable.

**D. EU3 – 600-hp Detroit Diesel 7123-7300 Starting Motor**

Permit Condition	Pollutant/Parameter	Permit Limitation	Compliance Demonstration		Reporting
			Method	Frequency	
D.1, D.4, D.7, D.10, D.11, D.12	Opacity	20%	Method 9	As required by the Department and Section III.A.1	Semiannual
D.2., D.5, D.8, D.11, D.12	Particulate from fuel combustion	$E=1.026 * H^{-0.233}$	Refinery quality No.2 fuel oil	Ongoing	Semiannual
D.3, D.6, D.9, D.11, D.12	Sulfur compound in fuel (liquid)	<u>1 pound</u> million Btu fired	fuel analysis provided by the fuel provider	Annual	Semiannual

**Conditions**

- D.1. Montana-Dakota shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibits an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- D.2. Montana-Dakota shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of  $E = 1.026 * H^{-0.233}$  for new fuel burning equipment, where: H = heat input capacity in MMBtu/hr and E = maximum allowable emission rate in lb/MMBtu (ARM 17.8.309).
- D.3. Montana-Dakota shall not burn any liquid fuel containing sulfur compounds in excess of 1 pound per million Btu of liquid fuel fired (ARM 17.8.322(4)).

## Compliance Demonstration

- D.4. Montana-Dakota shall burn only refinery quality No. 2 fuel oil or conduct a Method 9 test as required by the Department and Section III.A.1 to monitor compliance with the opacity limitation in Section III.D.1. Method 9 tests shall be performed in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.749 and ARM 17.8.106).
- D.5. Monitoring compliance with the particulate from fuel combustion requirement may be satisfied by burning refinery quality No.2 fuel oil or pipeline quality natural gas on a continuous basis (ARM 17.8.1213).
- D.6. Monitoring compliance with the sulfur compounds in fuel (liquid) requirements shall be satisfied by annually providing a supplier's fuel analysis while burning No.2 fuel oil. The analysis must demonstrate that the No.2 fuel oil is less than 1 pound/million Btu fired (ARM 17.8.1213).

## Recordkeeping

- D.7. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (ARM 17.8.106 and ARM 17.8.1212).
- D.8. Montana-Dakota shall maintain a log on site to record the type of fuel used in the turbine (ARM 17.8.1212).
- D.9. Montana-Dakota shall maintain on site a record of the fuel analyses provided by the fuel provider for the fuel types used during the previous 12-month period (ARM 17.8.1212).

## Reporting

- D.10. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- D.11. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- D.12. The semiannual reporting shall provide (ARM 17.8.1212):
- a. A summary of results of the last source testing that was performed;
  - b. A summary of the log of the type of fuel used; and
  - c. A summary of the record of the fuel analyses provided by the fuel provider for the fuel types used during the previous 12-month period.

## E. EU4 - No.2 Fuel Oil Storage Tank and EU5 - No.2 Fuel Oil Storage Tank

Permit Condition	Pollutant/Parameter	Permit Limitation	Compliance Demonstration		Reporting
			Method	Frequency	
E.1, E.2, E.3, E.4, E.5, E.6	Opacity	20%	Method 9	As required by the Department and Section III.A.1	Annual

## Conditions

- E.1. Montana-Dakota shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibits an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).

## Compliance Demonstration

- E.2. As required by the Department and Section III.A.1, Montana-Dakota shall conduct a Method 9 test to monitor compliance with Section III.E.1. All source tests must be conducted in accordance with the Montana Source Testing Protocol and Procedures Manual (ARM 17.8.1213).

## Recordkeeping

- E.3. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (ARM 17.8.106 and ARM 17.8.1212).

## Reporting

- E.4. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- E.5. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- E.6. The semiannual reporting shall provide a summary of results of the last source testing that was performed (ARM 17.8.1212).

## F. EU06 – Emergency Diesel Generator

Permit Condition	Pollutant/Parameter	Permit Limitation	Compliance Demonstration		Reporting
			Method	Frequency	
F.1, F.4, F.7, F.9, F.10, F.11	Opacity	20%	Method 9	As required by the Department and Section III.A.1	Annual
F.2, F.5, F.7, F.9, F.10, F.11	Particulate from fuel combustion	$E = 1.026 * H^{-0.233}$	Method 5	As required by the Department and Section III.A.1	Semiannual
F.3, F.6, F.8, F.10, F.11	Hours of Operation	1000 hours per rolling 12-month period	Operating Log	Monthly	Semiannual

## Conditions

- F.1. Montana-Dakota shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibits an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.340(2)).

- F.2. Montana-Dakota shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of  $E = 1.026 * H^{-0.233}$  for existing fuel burning equipment, where H = heat input capacity in MMBtu/hr and E = maximum allowable emission rate in lb/MMBtu (ARM 17.8.309).
- F.3. Montana-Dakota shall operate the diesel-powered emergency generator no more than 1000 hours per rolling 12-month period (ARM 17.8.749).

### **Compliance Demonstration**

- F.4. As required by the Department and Section III.A.1, Montana-Dakota shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).
- F.5. As required by the Department and Section III.A.1, Montana-Dakota shall perform a Method 5 in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- F.6. Montana-Dakota shall document, by month, the hours of operation of the 2 MW diesel generator. By the 25th of each month, Montana-Dakota shall total the hours of operation from the diesel generator during the previous 12-months to verify compliance with the limitation in Section III.F.3. (ARM 17.8.1213).

### **Recordkeeping**

- F.7. All source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- F.8. Montana-Dakota shall maintain a log on site of the hours of operation of the emergency diesel generator as described in Section III.F.6 (ARM 17.8.1212).

### **Reporting**

- F.9. All source test reports must be submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- F.10. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- F.11. The semiannual reporting shall provide (ARM 17.8.1212):
- a A summary of results of the last source testing that was performed; and
  - b A summary of the log of hours of operation of the generator.

## Section IV - Nonapplicable Requirements

Montana-Dakota did not request a shield from any of the Air Quality Administrative Rules of Montana (ARM); however, Federal Regulations identified as not applicable to the facility at the time of the permit issuance are listed below (ARM 17.8.1214). The following list does not preclude Montana-Dakota from complying with any new requirement that may become applicable during the permit term.

### A. Facility Wide

Federal Rule Citation	Reason
40 CFR 60, Subparts C, Ca, Cb 40 CFR 60, Subparts D, Da, Db, Dc 40 CFR 60, Subparts E-J 40 CFR 60, Subparts K, Ka, Kb 40 CFR 60, Subparts L-Z 40 CFR 60, Subparts AA-EE 40 CFR 60, Subparts GG-HH 40 CFR 60, Subparts KK-NN 40 CFR 60, Subparts PP-XX 40 CFR 60, Subparts AAA-BBB 40 CFR 60, Subparts DDD 40 CFR 60, Subparts FFF-LLL 40 CFR 60, Subparts NNN-VVV 40 CFR 61, Subparts B-F 40 CFR 61, Subparts H-L 40 CFR 61, Subparts N-R 40 CFR 61, Subparts V-W 40 CFR 61, Subpart Y 40 CFR 61, Subpart BB 40 CFR 61, Subpart FF	These requirements are not applicable because the facility is not an affected source as defined in these regulations.

### B. Emission Units

Montana-Dakota did not request a shield for specific emission units; therefore, a permit shield will not be granted to individual emission units.

## SECTION V – GENERAL PERMIT CONDITIONS

### A. COMPLIANCE REQUIREMENTS

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(a)-(c)&(e), §1206(6)(c)&(b)

1. The permittee must comply with all conditions of the permit. Any noncompliance with the terms or conditions of the permit constitutes a violation of the Montana Clean Air Act, and may result in enforcement action, permit modification, revocation and reissuance, or termination, or denial of a permit renewal application under ARM Title 17, Chapter 8, Subchapter 12.
2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
3. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. If appropriate, this factor may be considered as a mitigating factor in assessing a penalty for noncompliance with an applicable requirement if the source demonstrates that both the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations, and that such health, safety or environmental impacts were unforeseeable and could not have otherwise been avoided.
4. The permittee shall furnish to the Department, within a reasonable time set by the Department (not to be less than 15 days), any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of those records that are required to be kept pursuant to the terms of the permit. This subsection does not impair or otherwise limit the right of the permittee to assert the confidentiality of the information requested by the Department, as provided in 75-2-105, MCA.
5. Any schedule of compliance for applicable requirements with which the source is not in compliance with at the time of permit issuance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it was based.
6. For applicable requirements that will become effective during the permit term, the source shall meet such requirements on a timely basis unless a more detailed plan or schedule is required by the applicable requirement or the Department.

### B. CERTIFICATION REQUIREMENTS

ARM 17.8, Subchapter 12, Operating Permit Program §1207 and §1213(7)(a)&(c)-(d)

1. Any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12, shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
2. Compliance certifications shall be submitted by February 15 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. Each certification must include the required information for the previous calendar year (i.e., January 1 – December 31).



3. Compliance certifications shall include the following:
  - a. The identification of each term or condition of the permit that is the basis of the certification;
  - b. The identification of the method(s) or other means used by the owner or operator for determining the status of compliance with each term or condition during the certification period, consistent with ARM 17.8.1212;
  - c. The status of compliance with each term and condition for the period covered by the certification, *including whether compliance during the period was continuous or intermittent* (based on the method or means identified in ARM 17.8.1213(7)(c)(ii), as described above); and
  - d. Such other facts as the Department may require to determine the compliance status of the source.
4. All compliance certifications must be submitted to the Environmental Protection Agency, as well as to the Department, at the addresses listed in the Notification Addresses Appendix of this permit.

**C. PERMIT SHIELD**

ARM 17.8, Subchapter 12, Operating Permit Program §1214(1)-(4)

1. The applicable requirements and non-federally enforceable requirements are included and specifically identified in this permit and the permit includes a precise summary of the requirements not applicable to the source. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements and any non-federally enforceable requirements as of the date of permit issuance.
2. The permit shield described in 1 above shall remain in effect during the appeal of any permit action (renewal, revision, reopening, or revocation and reissuance) to the Board of Environmental Review (Board), until such time as the Board renders its final decision.
3. Nothing in this permit alters or affects the following:
  - a. The provisions of Sec. 7603 of the FCAA, including the authority of the administrator under that section;
  - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
  - c. The applicable requirements of the Acid Rain Program, consistent with Sec. 7651g(a) of the FCAA;
  - d. The ability of the administrator to obtain information from a source pursuant to Sec. 7414 of the FCAA;
  - e. The ability of the Department to obtain information from a source pursuant to the Montana Clean Air Act, Title 75, Chapter 2, MCA;
  - f. The emergency powers of the Department under the Montana Clean Air Act, Title 75, Chapter 2, MCA; and

- g. The ability of the Department to establish or revise requirements for the use of Reasonably Available Control Technology (RACT) as defined in ARM Title 17, Chapter 8. However, if the inclusion of a RACT into the permit pursuant to ARM Title 17, Chapter 8, Subchapter 12, is appealed to the Board, the permit shield, as it applies to the source's existing permit, shall remain in effect until such time as the Board has rendered its final decision.
- 4. Nothing in this permit alters or affects the ability of the Department to take enforcement action for a violation of an applicable requirement or permit term demonstrated pursuant to ARM 17.8.106, Source Testing Protocol.
- 5. Pursuant to ARM 17.8.132, for the purpose of submitting a compliance certification, nothing in these rules shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance. However, when compliance or noncompliance is demonstrated by a test or procedure provided by permit or other applicable requirements, the source shall then be presumed to be in compliance or noncompliance unless that presumption is overcome by other relevant credible evidence.
- 6. The permit shield will not extend to minor permit modifications or changes not requiring a permit revision (see Sections I & J).
- 7. The permit shield will extend to significant permit modifications and transfer or assignment of ownership (see Sections K & N).

**D. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS**

ARM 17.8, Subchapter 12, operating Permit Program §1212(2)&(3)

- 1. Unless otherwise provided in this permit, the permittee shall maintain compliance monitoring records that include the following information:
  - a. The date, place as defined in the permit, and time of sampling or measurement;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of such analyses; and
  - f. The operating conditions at the time of sampling or measurement.
- 2. The permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. All monitoring data, support information, and required reports and summaries may be maintained in computerized form at the plant site if the information is made available to Department personnel upon request, which may be for either hard copies or computerized format. Strip-charts must be maintained in their original form at the plant site and shall be made available to Department personnel upon request.
- 3. The permittee shall submit to the Department, at the addresses located in the Notification Addresses Appendix of this permit, reports of any required monitoring by February 15 and August 15 of each year, or more frequently if otherwise specified in an applicable requirement

or elsewhere in the permit. The monitoring report submitted on February 15 of each year must include the required monitoring information for the period of July 1 through December 31 of the previous year. The monitoring report submitted on August 15 of each year must include the required monitoring information for the period of January 1 through June 30 of the current year. All instances of deviations from the permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official, consistent with ARM 17.8.1207.

#### **E. PROMPT DEVIATION REPORTING**

##### ARM 17.8, Subchapter 12, Operating Permit Program §1212(3)(c)

The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. To be considered prompt, deviations shall be reported to the Department within the following timeframes (unless otherwise specified in an applicable requirement):

1. For deviations which may result in emissions potentially in violation of permit limitations:
  - a. An initial phone notification (or faxed or electronic notification) describing the incident within 24 hours (or the next business day) of discovery; and,
  - b. A follow-up written, faxed, or electronic report within 30 days of discovery of the deviation that describes the probable cause of the reported deviation and any corrective actions or preventative measures taken.
2. For deviations attributable to malfunctions, deviations shall be reported to the Department in accordance with the malfunction reporting requirements under ARM 17.8.110; and
3. For all other deviations, deviations shall be reported to the Department via a written, faxed, or electronic report within 90 days of discovery (as determined through routine internal review by the permittee).
4. Prompt deviation reports do not need to be resubmitted with regular semiannual (or other routine) reports, but may be referenced by the date of submittal.

#### **F. EMERGENCY PROVISIONS**

##### ARM 17.8, Subchapter 12, Operating Permit Program §1201(13) and §1214(5), (6)&(8)

1. An “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation and causes the source to exceed a technology-based emission limitation under this permit due to the unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of reasonable preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates through properly signed, contemporaneous logs, or other relevant evidence, that:
  - a. An emergency occurred and the permittee can identify the cause(s) of the emergency;
  - b. The permitted facility was at the time being properly operated;

- c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in the permit; and
  - d. The permittee submitted notice of the emergency to the Department within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirements of ARM 17.8.1212(3)(c). This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
3. These emergency provisions are in addition to any emergency, malfunction or upset provision contained in any applicable requirement.

#### **G. INSPECTION AND ENTRY**

##### ARM 17.8, Subchapter 12, Operating Permit Program §1213(3)&(4)

- 1. Upon presentation of credentials and other requirements as may be required by law, the permittee shall allow the Department, the administrator, or an authorized representative (including an authorized contractor acting as a representative of the Department or the administrator) to perform the following:
  - a. Enter the premises where a source required to obtain a permit is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
  - c. Inspect at reasonable times any facilities, emission units, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
  - d. As authorized by the Montana Clean Air Act and rules promulgated thereunder, sample or monitor, at reasonable times, any substances or parameters at any location for the purpose of assuring compliance with the permit or applicable requirements.
- 2. The permittee shall inform the inspector of all workplace safety rules or requirements at the time of inspection. This section shall not limit in any manner the Department's statutory right of entry and inspection as provided for in 75-2-403, MCA.

#### **H. FEE PAYMENT**

##### ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(f) and ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation, and Open Burning Fees §505(3)-(5) (STATE ONLY)

- 1. The permittee must pay application and operating fees, pursuant to ARM Title 17, Chapter 8, Subchapter 5.
- 2. Annually, the Department shall provide the permittee with written notice of the amount of the fee and the basis for the fee assessment. The air quality operation fee is due 30 days after receipt of the notice, unless the fee assessment is appealed pursuant to ARM 17.8.511. If any portion of the fee is not appealed, that portion of the fee that is not appealed is due 30 days after receipt of the notice. Any remaining fee, which may be due after the completion of an appeal, is due immediately upon issuance of the Board's decision or upon completion of any judicial review of the Board's decision.

3. If the permittee fails to pay the required fee (or any required portion of an appealed fee) within 90 days of the due date of the fee, the Department may impose an additional assessment of 15% of the fee (or any required portion of an appealed fee) or \$100, whichever is greater, plus interest on the fee (or any required portion of an appealed fee), computed at the interest rate established under 15-31-510(3), MCA.

**I. MINOR PERMIT MODIFICATIONS**

ARM 17.8, Subchapter 12, Operating Permit Program §1226(3)&(11)

1. An application for a minor permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation, or deletion, and may reference any required information that has been previously submitted.
2. The permit shield under ARM 17.8.1214 will not extend to any minor modifications processed pursuant to ARM 17.8.1226.

**J. CHANGES NOT REQUIRING PERMIT REVISION**

ARM 17.8, Subchapter 12, Operating Permit Program §1224(1)-(3), (5)&(6)

1. The permittee is authorized to make changes within the facility as described below, provided the following conditions are met:
  - a. The proposed changes do not require the permittee to obtain an air quality preconstruction permit under ARM Title 17, Chapter 8, Subchapter 7;
  - b. The proposed changes are not modifications under Title I of the FCAA, or as defined in ARM Title 17, Chapter 8, Subchapters 8, 9, or 10;
  - c. The emissions resulting from the proposed changes do not exceed the emissions allowable under this permit, whether expressed as a rate of emissions or in total emissions;
  - d. The proposed changes do not alter permit terms that are necessary to enforce applicable emission limitations on emission units covered by the permit; and
  - e. The facility provides the administrator and the Department with written notification at least 7 days prior to making the proposed changes.
2. The permittee and the Department shall attach each notice provided pursuant to 1.e above to their respective copies of this permit.
3. Pursuant to the conditions above, the permittee is authorized to make Sec. 502(b)(10) changes, as defined in ARM 17.8.1201(30), without a permit revision. For each such change, the written notification required under 1.e above shall include a description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
4. The permittee may make a change not specifically addressed or prohibited by the permit terms and conditions without requiring a permit revision, provided the following conditions are met:
  - a. Each proposed change does not weaken the enforceability of any existing permit conditions;
  - b. The Department has not objected to such change;

- c. Each proposed change meets all applicable requirements and does not violate any existing permit term or condition; and
  - d. The permittee provides contemporaneous written notice to the Department and the administrator of each change that is above the level for insignificant emission units as defined in ARM 17.8.1201(22) and 17.8.1206(3), and the written notice describes each such change, including the date of the change, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
5. The permit shield authorized by ARM 17.8.1214 shall not apply to changes made pursuant to ARM 17.8.1224(3) and (5), but is applicable to terms and conditions that allow for increases and decreases in emissions pursuant to ARM 17.8.1224(4).

**K. SIGNIFICANT PERMIT MODIFICATIONS**

ARM 17.8, Subchapter 12, Operating Permit Program §1227(1), (3)&(4)

- 1. The modification procedures set forth in 2 below must be used for any application requesting a significant modification of this permit. Significant modifications include the following:
  - a. Any permit modification that does not qualify as either a minor modification or as an administrative permit amendment;
  - b. Every significant change in existing permit monitoring terms or conditions;
  - c. Every relaxation of permit reporting or recordkeeping terms or conditions that limit the Department's ability to determine compliance with any applicable rule, consistent with the requirements of the rule; and
  - d. Any other change determined by the Department to be significant.
- 2. Significant modifications shall meet all requirements of ARM Title 17, Chapter 8, including those for applications, public participation, and review by affected states and the administrator, as they apply to permit issuance and renewal, except that an application for a significant permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation or deletion.
- 3. The permit shield provided for in ARM 17.8.1214 shall extend to significant modifications.

**L. REOPENING FOR CAUSE**

ARM 17.8, Subchapter 12, Operating Permit Program §1228(1)&(2)

- 1. This permit may be reopened and revised under the following circumstances:
  - a. Additional applicable requirements under the FCAA become applicable to the facility when the permit has a remaining term of 3 or more years. Reopening and revision of the permit shall be completed not later than 18 months after promulgation of the applicable requirement. No reopening is required under ARM 17.8.1228(1)(a) if the effective date of the applicable requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms or conditions have been extended pursuant to ARM 17.8.1220(12) or 17.8.1221(2);
  - b. Additional requirements (including excess emission requirements) become applicable to an affected source under the Acid Rain Program. Upon approval by the administrator, excess emission offset plans shall be deemed incorporated into the permit;

- c. The Department or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit; or
- d. The administrator or the Department determines that the permit must be revised or revoked and reissued to ensure compliance with the applicable requirements.

**M. PERMIT EXPIRATION AND RENEWAL**

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(g), §1220(11)&(12), and §1205(2)(d)

- 1. This permit is issued for a fixed term of 5 years.
- 2. Renewal of this permit is subject to the same procedural requirements that apply to permit issuance, including those for application, content, public participation, and affected state and administrator review.
- 3. Expiration of this permit terminates the permittee's right to operate unless a timely and administratively complete renewal application has been submitted consistent with ARM 17.8.1221 and 17.8.1205(2)(d). If a timely and administratively complete application has been submitted, all terms and conditions of the permit, including the application shield, remain in effect after the permit expires until the permit renewal has been issued or denied.
- 4. For renewal, the permittee shall submit a complete air quality operating permit application to the Department not later than 6 months prior to the expiration of this permit, unless otherwise specified. If necessary to ensure that the terms of the existing permit will not lapse before renewal, the Department may specify, in writing to the permittee, a longer time period for submission of the renewal application. Such written notification must be provided at least one year before the renewal application due date established in the existing permit.

**N. SEVERABILITY CLAUSE**

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(i)&(l)

- 1. The administrative appeal or subsequent judicial review of the issuance by the Department of an initial permit under this subchapter shall not impair in any manner the underlying applicability of all applicable requirements, and such requirements continue to apply as if a final permit decision had not been reached by the Department.
- 2. If any provision of a permit is found to be invalid, all valid parts that are severable from the invalid part remain in effect. If a provision of a permit is invalid in one or more of its applications, the provision remains in effect in all valid applications that are severable from the invalid applications.

**O. TRANSFER OR ASSIGNMENT OF OWNERSHIP**

ARM 17.8, Subchapter 12, Operating Permit Program §1225(2)&(4)

- 1. If an administrative permit amendment involves a change in ownership or operational control, the applicant must include in its request to the Department a written agreement containing a specific date for the transfer of permit responsibility, coverage and liability between the current and new permittee.
- 2. The permit shield provided for in ARM 17.8.1214 shall not extend to administrative permit amendments.

**P. EMISSIONS TRADING, MARKETABLE PERMITS, ECONOMIC INCENTIVES**

ARM 17.8, Subchapter 12, Operating Permit Program §1226(2)

Notwithstanding ARM 17.8.1226(1) and (7), minor air quality operating permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in the Montana State Implementation Plan or in applicable requirements promulgated by the administrator.

**Q. NO PROPERTY RIGHTS CONVEYED**

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(d)

This permit does not convey any property rights of any sort, or any exclusive privilege.

**R. TESTING REQUIREMENTS**

ARM 17.8, Subchapter 1, General Provisions §105

The permittee shall comply with ARM 17.8.105.

**S. SOURCE TESTING PROTOCOL**

ARM 17.8, Subchapter 1, General Provisions §106

The permittee shall comply with ARM 17.8.106.

**T. MALFUNCTIONS**

ARM 17.8, Subchapter 1, General Provisions §110

The permittee shall comply with ARM 17.8.110.

**U. CIRCUMVENTION**

ARM 17.8, Subchapter 1, General Provisions §111

The permittee shall comply with ARM 17.8.111.

**V. MOTOR VEHICLES**

ARM 17.8, Subchapter 3, Emission Standards §325

The permittee shall comply with ARM 17.8.325.

**W. ANNUAL EMISSIONS INVENTORY**

ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation and Open Burning Fees §505 (STATE ONLY)

The permittee shall supply the Department with annual production and other information for all emission units necessary to calculate actual or estimated actual amount of air pollutants emitted during each calendar year. Information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request, unless otherwise specified in this permit. Information shall be in the units required by the Department.

**X. OPEN BURNING**

ARM 17.8, Subchapter 6, Open Burning §604, 605 and 606

The permittee shall comply with ARM 17.8.604, 605 and 606.



## **Y. PRECONSTRUCTION PERMITS**

ARM 17.8, Subchapter 7, Permit, Construction and Operation of Air Contaminant Sources §705, 708 and 733 (ARM 17.8.745(1) and 764(1)(b) are STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP)

1. Except as specified, no person shall construct, install, alter or use any air contaminant source or stack associated with any source without first obtaining a permit from the Department or Board. A permit is not required for those sources or stacks as specified by ARM 17.8.744(1)(a)-(k).
2. The permittee shall comply with ARM 17.8.743, 744, 745, 748, and 764.
3. ARM 17.8.745(1) specifies de minimis changes as construction or changed conditions of operation at a facility holding an air quality preconstruction permit issued under Chapter 8 that does not increase the facility's potential to emit by more than 15 tons per year of any pollutant, except (STATE ENFORCEABLE ONLY until approved by the EPA as part of the SIP):
  - a. Any construction or changed condition that would violate any condition in the facility's existing air quality preconstruction permit or any applicable rule contained in Chapter 8 is prohibited, except as provided in ARM 17.8.745(2);
  - b. Any construction or changed conditions of operation that would qualify as a major modification under Subchapters 8, 9 or 10 of Chapter 8;
  - c. Any construction or changed condition of operation that would affect the plume rise or dispersion characteristic of emissions that would cause or contribute to a violation of an ambient air quality standard or ambient air increment as defined in ARM 17.8.804;
  - d. Any construction or improvement project with a potential to emit more than 15 tons per year may not be artificially split into smaller projects to avoid air quality preconstruction permitting; or
  - e. Emission reductions obtained through offsetting within a facility are not included when determining the potential emission increase from construction or changed conditions of operation, unless such reductions are made federally enforceable.
4. Any facility making a de minimis change pursuant to ARM 17.8.745(1) shall notify the Department if the change would include a change in control equipment, stack height, stack diameter, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1). (STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP)

## **Z. NATIONAL EMISSION STANDARD FOR ASBESTOS**

40 CFR, Part 61, Subpart M

The permittee shall not conduct any asbestos abatement activities except in accordance with 40 CFR 61, Subpart M (National Emission Standard for Hazardous Air Pollutants for Asbestos).

## **AA. ASBESTOS**

ARM 17.74, Subchapter 3, General Provisions and Subchapter 4, Fees

The permittee shall comply with ARM 17.74.301, *et seq.*, and ARM 17.74.401, *et seq.* (State only)

## **BB. STRATOSPHERIC OZONE PROTECTION – SERVICING OF MOTOR VEHICLE AIR CONDITIONERS**

40 CFR, Part 82, Subpart B

If the permittee performs a service on motor vehicles and this service involves ozone-depleting substance/refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR 82, Subpart B.

## **CC. STRATOSPHERIC OZONE PROTECTION – RECYCLING AND EMISSION REDUCTIONS**

40 CFR, Part 82, Subpart F

The permittee shall comply with the standards for recycling and emission reductions in 40 CFR 82, Subpart F, except as provided for MVACs in Subpart B.

1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
2. Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
3. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technical certification program pursuant to §82.161.
4. Persons disposing of small appliances, MVACs and MVAC-like (as defined at §82.152) appliances must comply with recordkeeping requirements pursuant to §82.166.
5. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

## **DD. EMERGENCY EPISODE PLAN**

The permittee shall comply with the requirements contained in Chapter 9.7 of the State of Montana Air Quality Control Implementation Plan.

Each major source emitting 100 tons per year located in a Priority I Air Quality Control Region, shall submit to the Department a legally enforceable Emergency Episode Action Plan (EEAP) that details how the source will curtail emissions during an air pollutant emergency episode. The industrial EEAP shall be in accordance with the Department's EEAP and shall be submitted according to a timetable developed by the Department, following Priority I reclassification.

## **EE. DEFINITIONS**

Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix of this permit, shall have the meaning assigned to them in the referenced regulations.

## **APPENDICES**

## APPENDIX A. INSIGNIFICANT EMISSION UNITS

**Disclaimer:** None of the information found in this Appendix shall be considered to be State or Federally enforceable; it is presented to assist the facility, permitting authority, inspectors, and citizens.

### List of Insignificant Activities

The following table of insignificant sources and/or activities was provided by the permittee to assist in the understanding of the facility layout. Currently, there are no requirements to update such a list so sources and/or activities may have changed since the last filing.

Insignificant Emissions Unit ID	Description
IEU1	Fugitive emissions from in-plant vehicle traffic
IEU2	60 kilowatt emergency plant power supply diesel generator
IEU3	Starting motor
IEU4	Storage tank
IEU5	Natural gas fired liquid fuel heater

## APPENDIX B. DEFINITIONS and ABBREVIATIONS

"**Act**" means the Clean Air Act, as amended, 42 U.S. 7401, *et seq.*

"**Administrative permit amendment**" means an air quality operating permit revision that:

- (a) Corrects typographical errors;
- (b) Identifies a change in the name, address, or phone number of any person identified in the air quality operating permit, or identifies a similar minor administrative change at the source;
- (c) Requires more frequent monitoring or reporting by the permittee;
- (d) Requires changes in monitoring or reporting requirements that the Department deems to be no less stringent than current monitoring or reporting requirements;
- (e) Allows for a change in ownership or operational control of a source if the Department has determined that no other change in the air quality operating permit is necessary, consistent with ARM 17.8.1225; and
- (f) Incorporates any other type of change which the Department has determined to be similar to those revisions set forth in (a)-(e).

"**Applicable requirement**" means all of the following as they apply to emission units in a source requiring an air quality operating permit (including requirements that have been promulgated or approved by the Department or the administrator through rule making at the time of issuance of the air quality operating permit, but have future-effective compliance dates, provided that such requirements apply to sources covered under the operating permit):

- (a) Any standard, rule, or other requirement, including any requirement contained in a consent decree or judicial or administrative order entered into or issued by the Department, that is contained in the Montana State Implementation Plan approved or promulgated by the administrator through rule making under Title I of the FCAA;
- (b) Any federally enforceable term, condition or other requirement of any air quality preconstruction permit issued by the Department under Subchapters 7, 8, 9, and 10 of this chapter, or pursuant to regulations approved or promulgated through rule making under Title I of the FCAA, including parts C and D;
- (c) Any standard or other requirement under Sec. 7411 of the FCAA, including Sec. 7411(d);
- (d) Any standard or other requirement under Sec. 7412 of the FCAA, including any requirement concerning accident prevention under Sec. 7412(r)(7), but excluding the contents of any risk management plan required under Sec. 7412(r);
- (e) Any standard or other requirement of the acid rain program under Title IV of the FCAA or regulations promulgated thereunder;
- (f) Any requirements established pursuant to Sec. 7661c(b) or Sec. 7414(a)(3) of the FCAA;
- (g) Any standard or other requirement governing solid waste incineration, under Sec. 7429 of the FCAA;

- (h) Any standard or other requirement for consumer and commercial products, under Sec. 7511b(e) of the FCAA;
- (i) Any standard or other requirement for tank vessels, under Sec. 7511b(f) of the FCAA;
- (j) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the FCAA, unless the administrator determines that such requirements need not be contained in an air quality operating permit;
- (k) Any national ambient air quality standard or increment or visibility requirement under part C of Title I of the FCAA, but only as it would apply to temporary sources permitted pursuant to Sec. 7661c(e) of the FCAA; or
- (l) Any federally enforceable term or condition of any air quality open burning permit issued by the Department under Subchapter 6.

**"Department"** means the Montana Department of Environmental Quality.

**"Emissions unit"** means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under Sec. 7412(b) of the FCAA. This term is not meant to alter or affect the definition of the term "unit" for purposes of Title IV of the FCAA.

**"FCAA"** means the Federal Clean Air Act, as amended.

**"Federally enforceable"** means all limitations and conditions which are enforceable by the administrator, including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within the Montana State Implementation Plan, and any permit requirement established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating permits issued under an EPA approved program that is incorporated into the Montana State Implementation Plan and expressly requires adherence to any permit issued under such program.

**"Fugitive emissions"** means those emissions, which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

**"General air quality operating permit"** or **"general permit"** means an air quality operating permit that meets the requirements of ARM 17.8.1222, covers multiple sources in a source category, and is issued in lieu of individual permits being issued to each source.

**"Hazardous air pollutant"** means any air pollutant listed as a hazardous air pollutant pursuant to Sec. 112(b) of the FCAA.

**"Non-federally enforceable requirement"** means the following as they apply to emission units in a source requiring an air quality operating permit:

- (a) Any standard, rule, or other requirement, including any requirement contained in a consent decree, or judicial or administrative order entered into or issued by the Department, that is not contained in the Montana State Implementation Plan approved or promulgated by the administrator through rule making under Title I of the FCAA
- (b) Any term, condition or other requirement contained in any air quality preconstruction permit issued by the Department under Subchapters 7, 8, 9, and 10 of this chapter that is not federally enforceable;

- (c) Does not include any Montana ambient air quality standard contained in Subchapter 2 of this chapter.

**"Permittee"** means the owner or operator of any source subject to the permitting requirements of this subchapter, as provided in ARM 17.8.1204, that holds a valid air quality operating permit or has submitted a timely and complete permit application for issuance, renewal, amendment, or modification pursuant to this subchapter.

**"Regulated air pollutant"** means the following:

- (a) Nitrogen oxides or any volatile organic compounds;
- (b) Any pollutant for which a national ambient air quality standard has been promulgated;
- (c) Any pollutant that is subject to any standard promulgated under Sec. 7411 of the FCAA;
- (d) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the FCAA; or
- (e) Any pollutant subject to a standard or other requirement established or promulgated under Sec. 7412 of the FCAA, including but not limited to the following:
  - (i) Any pollutant subject to requirements under Sec. 7412(j) of the FCAA. If the administrator fails to promulgate a standard by the date established in Sec. 7412(e) of the FCAA, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established in Sec. 7412(e) of the FCAA; and
  - (ii) Any pollutant for which the requirements of Sec. 7412(g)(2) of the FCAA have been met but only with respect to the individual source subject to Sec. 7412(g)(2).

**"Responsible official"** means one of the following:

- (a) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
  - (i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
  - (ii) The delegation of authority to such representative is approved in advance by the Department.
- (b) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.
- (c) For a municipality, state, federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a regional administrator of the environmental protection agency).

- (d) For affected sources: the designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the FCAA or the regulations promulgated thereunder are concerned, and the designated representative for any other purposes under this subchapter.



## ACRONYMS and ABBREVIATIONS

AFR	Air to Fuel Ratio
ARM	Administrative Rules of Montana
BACT	Best Available Control Technology
Btu	British thermal unit
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
EU	emissions unit
FCAA	Federal Clean Air Act
FERC	Federal Energy Regulatory Commission
HAP	hazardous air pollutant
hp	horse power
hr	hour
hr/yr	hours per year
IEU	insignificant emissions unit
lb/hr	pounds per hour
MCA	Montana Code Annotated
MBtu	thousand British thermal units
MMBtu	million British thermal units
MMscf	million standard cubic feet
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NG	natural gas
NO <sub>x</sub>	oxides of nitrogen
NSPS	New Source Performance Standards
O <sub>2</sub>	oxygen
Pb	lead
PM	particulate matter
PM <sub>10</sub>	particulate matter less than 10 microns in size
ppm	parts per million
psi	pounds per square inch
rpm	revolutions per minute
scf	standard cubic feet
SIC	Source Industrial Classification
SO <sub>x</sub>	oxides of sulfur
SO <sub>2</sub>	sulfur dioxide
TPY	tons per year
USC	United States Code
VE	visible emissions
VOC	volatile organic compound

## **APPENDIX C. NOTIFICATION ADDRESSES**

### **Compliance Notifications:**

Montana Department of Environmental Quality  
Permitting and Compliance Division  
Air Resources Management Bureau  
P.O. Box 200901  
Helena, MT 59620-0901

United States EPA  
Air Program Coordinator  
Region VIII, Montana Office  
10 W. 15<sup>th</sup> Suite 3200  
Helena, MT 59626

### **Permit Modifications:**

Montana Department of Environmental Quality  
Permitting and Compliance Division  
Air Resources Management Bureau  
P.O. Box 200901  
Helena, MT 59620-0901

Office of Partnerships and Regulatory Assistance  
Air and Radiation Program  
US EPA Region VIII 8P-AR  
999 18th Street, Suite 300  
Denver, Colorado 80202-2466

## APPENDIX D. AIR QUALITY INSPECTOR INFORMATION

**Disclaimer:** The information in this appendix is not State or Federally enforceable but is presented to assist the permittee, permitting authority, inspectors, and the public.

1. **Directions to Plant:** Located approximately 4 miles south of Glendive, Montana. The generating station is bordered on the west by Marsh Road.
2. **Safety Equipment Required:** Hard hat, steel-toed shoes/boots, and hearing protection (ear plugs will be provided by Montana-Dakota) are required at the facility. A detailed safety manual is available at the site, and an Montana-Dakota employee will conduct a safety briefing for any inspector prior to entering the plant area.
3. **Facility Plot Plan:** The facility plot plan was submitted as part of the application on 08/22/97.

## **APPENDIX E.        ACID RAIN**

Please see the following page for the EPA Phase II Permit Application.

## **APPENDIX F. NO<sub>x</sub> PEMS / CEMS**

Nothing in this appendix is intended to alter the requirements in the Acid Rain Appendix.

1. Pursuant to 40 CFR Part 75, Montana-Dakota shall calibrate, maintain, and operate continuous monitoring systems or predictive emissions monitoring systems.

The monitoring systems shall be capable of determining emissions in the units of the applicable standards.

Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required pursuant to 40 CFR Part 75, all continuous monitoring systems and predictive emissions monitoring systems shall be in continuous operation.

2. Compliance with 40 CFR Part 75 shall be deemed compliance with the requirements contained in 40 CFR §60.13(a) through (c), (e) through (g), and (i) through (j).
3. Montana-Dakota shall determine the gross calorific value (GCV) of the fuels using methods as identified in 40 CFR Part 75, Appendix F, §3.3.6.2, at a minimum of once per year for each fuel used.
4. Montana-Dakota shall conduct fuel analyses per the required methods in 40 CFR 75, Appendix F §3.3.6.1, or other method approved by the Department.
5. Montana-Dakota shall maintain records for a minimum of five years of the log sheets, computerized data, analysis, and calculations used to prepare the required reports.
6. Montana-Dakota shall submit reports to the Department containing the information required by 40 CFR §60.7 and as required below. All reports shall be required semiannually for each six-month period.
  - a. Montana-Dakota shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which the continuous monitoring system or predictive emission monitoring system is inoperative.
  - b. Montana-Dakota shall submit an excess emissions and monitoring systems performance report and/or a summary report form (see paragraph (c) below) to the Department. Written reports of excess emissions shall be reported in the units of the standard exceeded and shall include the following information:
    - i. The magnitude of excess emissions, any conversion factor(s) used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period.
    - ii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
    - iii. The date and time identifying each period during which the continuous or predictive monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

- iv. When no excess emissions have occurred, or the continuous or predictive monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
- c. The summary report form shall contain the information and be in the format shown in Figure 1. The summary report form shall be submitted as follows:
  - i. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CEMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in section (b) above need not be submitted unless requested.
  - ii. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CEMS or PEMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in section (b) above shall both be submitted.

Figure 1--Summary Report--Gaseous Excess Emission and Monitoring  
System Performance

**Pollutant:**

Reporting period dates: From \_\_\_\_\_ to \_\_\_\_\_

Emission Limitation:

Monitor Manufacturer and Model No.:

Date of Latest CEMS or PEMS Certification or Audit:

Process Unit(s) Description:

Total source operating time in reporting period:

**Emission Data Summary**

1. Duration of excess emission in reporting period due to:
  - a. Startup/shutdown.
  - b. Control equipment problems.
  - c. Process problems.
  - d. Other known causes.
  - e. Unknown causes.
2. Total duration of excess emissions.
3.  $\frac{\text{Total duration of excess emissions} \times (100)}{\text{Total Operating Time}} = \% \text{ excess emissions}$

**CEMS/PEMS Performance Summary**

1. CEMS/PEMS downtime in reporting period due to:
  - a. Monitor equipment malfunctions.
  - b. Non-Monitor equipment malfunctions.
  - c. Quality assurance calibrations.
  - d. Other known causes.
  - e. Unknown causes.
2. Total CEMS/PEMS Downtime (nearest quarter hour).
3.  $\frac{\text{Total CEMS/PEMS downtime}}{\text{Total operating time}} = \% \text{ downtime}$
4. Total operating time (nearest quarter hour).

The semiannual reports must be received by the Department on or before February 15 and August 15.

7. While operating PEMS, Montana-Dakota shall retest the NO<sub>x</sub> emission rate of the gas-fired peaking unit or the oil-fired peaking unit while combusting each type of fuel (or fuel mixture) for which a NO<sub>x</sub> emission rate versus heat input rate correlation curve was derived, at least once every 20 calendar quarters. If a required retest is not completed by the end of the 20th calendar quarter following the quarter of the last test, Montana-Dakota shall use the missing data substitution procedures in 40 CFR 75, Appendix E, Section 2.5, beginning with the first unit operating hour after the end of the 20th calendar quarter. Montana-Dakota shall continue using the missing data procedures until the required retest has been passed. Note that missing data substitution is fuel-specific (i.e., the use of substitute data is required only when combusting a fuel (or fuel mixture) for which the retesting deadline has not been met). Each time that a new fuel-specific correlation curve is derived from retesting, the new curve shall be used to report NO<sub>x</sub> emission rate, beginning with the first operating hour in which the fuel is combusted, following the completion of the retest.